

## ABSTRACT

The present invention relates to a method, apparatus, polynucleotide markers and its related products for detecting non-small cell lung cancer (NSCLC). Particularly, the method and apparatus of the present invention can detect and differentiate between  
5 adenocarcinoma, squamous cell carcinoma, and normal lung tissues. Twenty markers for NSCLC are disclosed. By probing for at least 6 of the 20 genes, detection of NSCLC cancer can be detected with at least about 90% accuracy.